

What is claimed is:

1. A device for applying at least one cable onto a rotating receiving surface having a linear surface speed V2, comprising:
  - a body;
  - at least one capstan rotatably mounted on the body to feed the cable in a feed direction at a linear speed V1;
  - displacement means for receiving the cable from the capstan and displacing the cable transversely relative to the rotating receiving surface responsive to a magnitude of a difference between V1 and V2,
  - positioning means for receiving the cable from the displacement means and positioning the cable on said receiving surface, and,
  - control means for controlling a transverse amplitude of the displacement directly by adjusting the speed V1 relative to the speed V2, wherein said amplitude is continuously variable during the positioning of the cable.
2. A device according to Claim 1, wherein the displacing means comprises first rotatable spindles disposed perpendicular to the feed direction, supported by the body, and a cable guiding head mounted to pivot on said rotatable spindles, wherein, cable moving at a speed V1 greater than V2 causes the cable guiding head to pivot, and first rotatable spindles cause the pivoted cable guiding head to reciprocate transversely.
3. A device according to Claim 2, wherein the cable guiding head is connected to the first rotatable spindles by levers, said levers being mounted on the guiding head via second rotatable spindles whose axes are parallel to those of the first rotatable spindles and which are mounted to rotate within said guiding head.
4. A device according to Claim 3, wherein the guiding head comprises a connecting rod that carries the second rotatable spindles.

5. A device according to Claim 2, wherein the guiding head has two cable guide rollers mounted to rotate freely on the guiding head, said rollers having respective grooves to receive said cable.

6. A device according to Claim 2, further comprising an electromagnet mounted to the body for exerting a restoring force on the guiding head.

7. A device for applying at least one cable onto a rotating receiving surface having a surface linear speed V2, comprising:

at least one capstan for receiving cable from a cable supply source and feeding the cable in a feed direction at a linear speed V1;

means for varying the speed V1 relative to the speed V2;

means for displacing the cable transversely relative to the receiving surface responsive to the speed V1 of the cable relative to the speed V2 of the rotating receiving surface, including rotary movement means having a rotation axis perpendicular to the cable feed direction and pivoting movement means movable in a plane containing the rotation axis, wherein feeding the cable at a speed V1 greater than V2 causes the pivoting movement means to pivot and rotation of the rotary movement means causes transverse reciprocating movement of the pivoted pivoting movement means, a magnitude of pivoted displacement being determined by the ratio between the speeds V1 and V2, and

means to position the cable on said receiving surface.

8. A process for applying at least one cable onto a rotating receiving surface, comprising the steps of:

feeding a cable in a direction substantially perpendicular to a rotation axis of the receiving surface,

displacing the cable transversely to said receiving surface to produce undulations of the cable on the receiving surface, the transverse displacement of the cable being obtained by feeding the cable at a linear speed greater than a linear speed of the receiving surface to a pivoting guide head and transversely reciprocating the guide head, a magnitude of pivoting being determined by a ratio of the cable speed to the receiving surface speed, and

positioning the cable on said receiving surface.